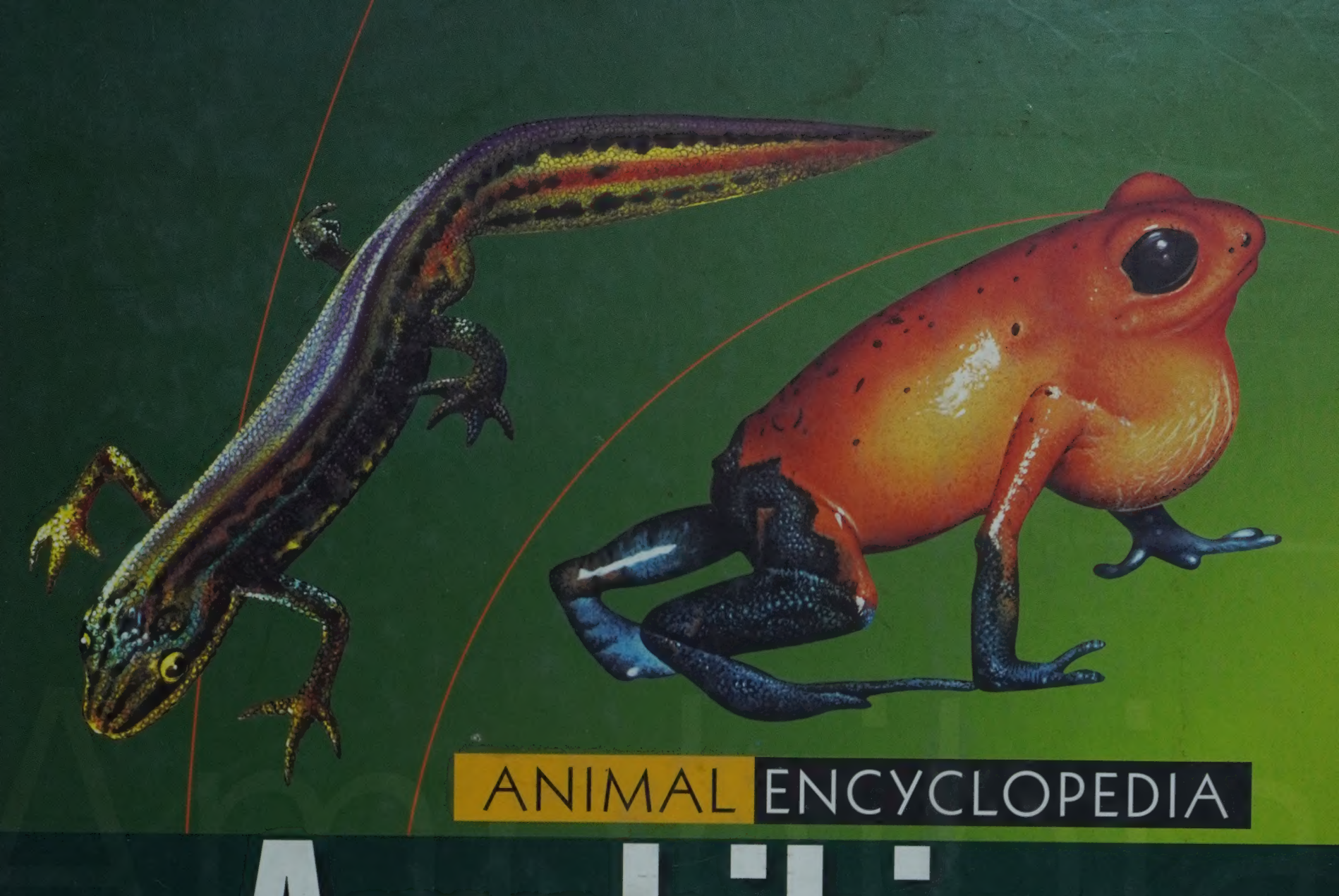

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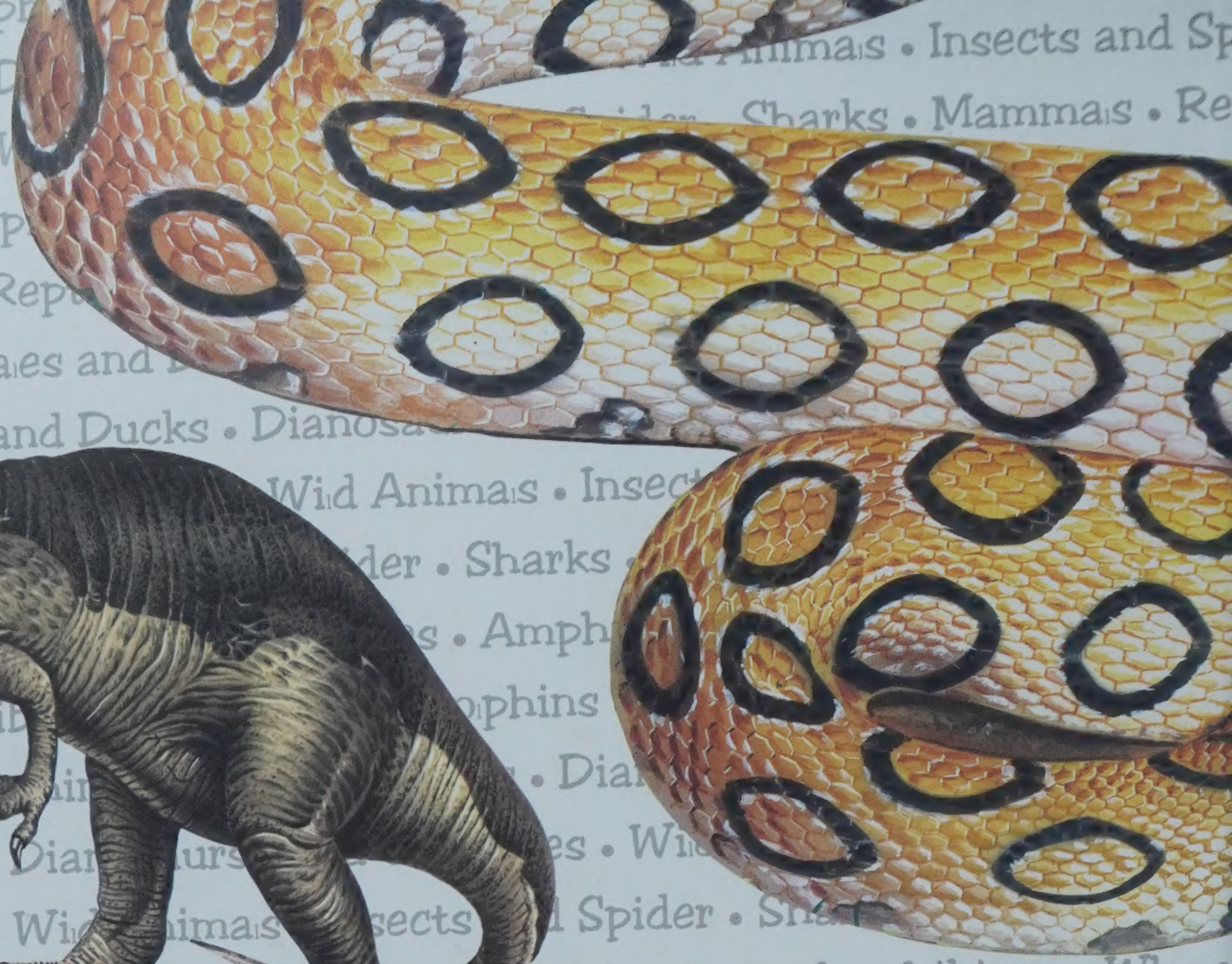
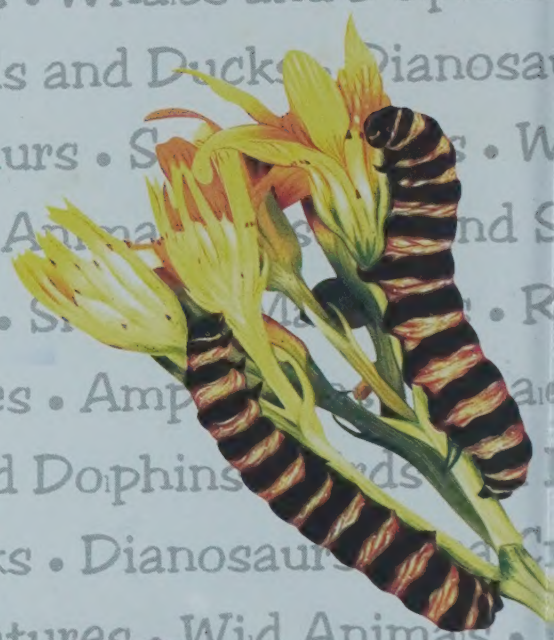
Amphibians





ANIMAL ENCYCLOPEDIA

Amphibians

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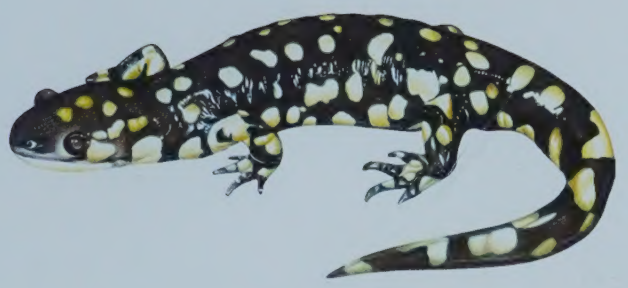
First published in 2008

Published by
Macaw Books
www.macawbooks.com

ISBN-978-1-60346-125-2

Printed in India



Contents

Amphibians 4

American Toad 6

Bullfrog 8

Cane Toad 10

Common Toad 12

Gray Tree Frog 14

Green Frog 16

Green Tree Frog 18

Leopard Frog 20

Marbled Salamander 22

Pacific Tree Frog 24

Poison Arrow Frog 26

Spotted Salamander 28

Tiger Salamander 30

Glossary 32

Amphibians

Amphibians are animals that live both on land and in water. They are cold-blooded animals that depend on sunlight to heat their body and remain active. Amphibians become sluggish in cold weather when there is not enough sunlight to heat their body. Most amphibians have soft, moist skin that helps them to breathe. They prefer to live in moist places or near water in order to keep their bodies from drying out.

Ancient animals

Amphibians have been around for a long time. The first amphibians appeared during the Devonian Period, around 368 million years ago. Frogs and toads are believed to have lived during the Jurassic Period.

Dual life

The word amphibian means "to live a double life." Amphibians have two distinct life stages, a larval stage and an adult stage. Adult amphibians live mostly on land but lay their eggs in water. During the larval stage, amphibians have gills and a tail which help them live in water. With time, they lose their gills and develop lungs which help them breathe on land; they also begin to grow limbs.

Skin

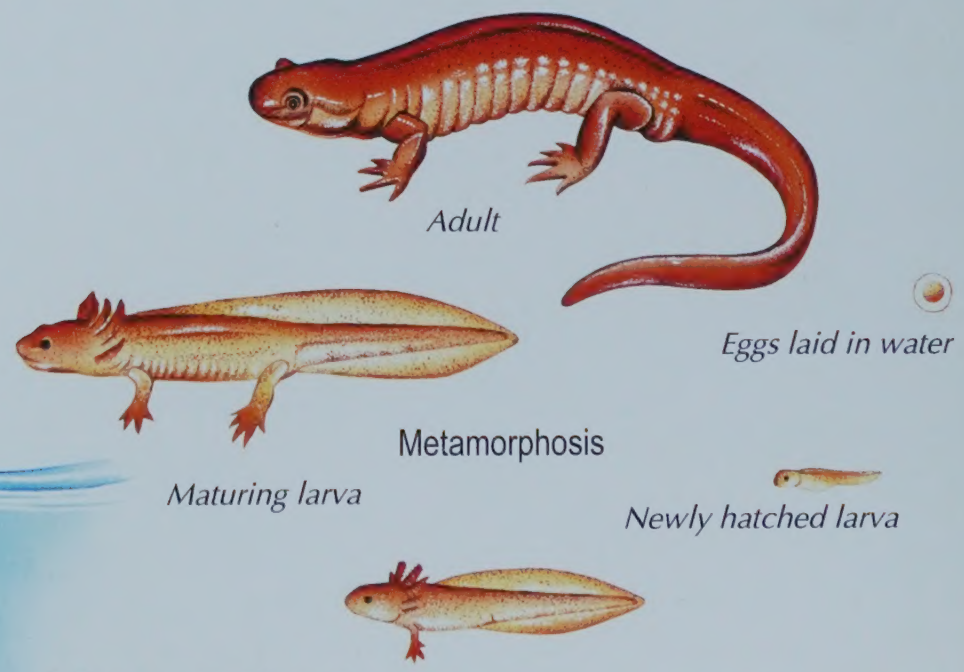
Most amphibians have thin, porous skin which allows liquids and gases to pass through easily. Therefore, they can breathe through their skin. Amphibians also absorb water and moisture through their skin. They produce a thick, slimy substance that moistens and protects their skin. The skin of many amphibians is brightly colored, especially that of frogs and salamanders.

Largest and smallest amphibian

The largest amphibian is the Japanese Giant Salamander. It is about 1.8 meters long and weighs 63 kilograms. The smallest amphibian is the Brazilian Gold Frog, also known as Izecksohn's toad. An adult grows to only about 9.8 millimeters and weighs just a few grams.

Cold blooded

All amphibians are ectothermic. This means that they are cold-blooded, and their body temperature dependent on the temperature of their surroundings. They bask in the sun to raise their body temperature, and, whey are too warm, they hide in burrows to cool down.



Metamorphosis

Amphibians go through an amazing transformation—from larva to adult—during their lifetimes. This transformation is known as metamorphosis. Amphibians metamorphose from an aquatic larva to a land-based adult. The aquatic larva has gills to help it breathe and a tail to help it swim. As the larva grows into an adult, it develops lungs and grows legs. These help it breathe and move on land. In some amphibian species, the gills remain throughout their lives.

American Toad

The American toad is a small toad with a round body. It is generally brown in color with thick skin. The skin contains dark spots with white borders; each spot has one or two warts inside it.

American toads can also be gray, red, or green in color. Their belly is white or yellow with dark gray mottling. They have four short legs with four toes on the front legs. They have a wide and sticky tongue which they use to catch their prey. American toads grow from five to eight centimeters in length.

Habitat

American toads live almost everywhere, from backyards to forests. They live in places covered with vegetation. American toads are usually active at night, and during the day, they hide under rocks, logs, porches, boardwalks, or flat stones or by freshwater ponds and pools.

Tadpoles

The tadpoles of American toads are almost black in color. They have round bodies with smooth skin and an almost rounded tail. The tadpoles metamorphose into toadlets that are usually 0.8 to 1.3 centimeters long. The toadlets are similar in color to the adult American toads.

American toad calls

American toads have a beautiful voice. Their calls are commonly heard in early spring, coming from pond edges or open pools. The call of American toad is long, trill, and melodious and lasts for eight to 20 seconds.

Dwarf American toad

The Dwarf American toad is a smaller subspecies of the American toad. It is about five centimeters in length and is generally dark reddish or brown in color with very few spots. It has almost smooth skin with just one or two warts inside each spot.

Did You Know?

American toads control the population of many kinds of insects. They eat different species of insects and other invertebrates. Thus, American toads are known as friends of gardeners and farmers.

Eastern American toad

The Eastern American toad is a medium-sized subspecies of the American toad. It has spots, each with just one or two warts, on its back and enlarged warts on its lower legs. It is very similar to American toads and is found in shady backyards and woodlands. Eastern American toads feed on insects and other small invertebrates.

Food habits

American toads eat a wide variety of insects, sometimes 1,000 or more every day. They are often seen catching insects under street or porch lights. These toads also feed on other invertebrates including snails, slugs, and earthworms. American toads are also known to feed on aquatic vegetation.

Predators and defenses

Snakes, herons, and raccoons are some of the well known predators of the American toad. Toads keep these predators away with foul-smelling toxins produced in specialized glands. Many snakes are immune to this toxin, and in order to avoid these snakes, the toads puff themselves up to look bigger or play dead.

Hibernation

American toads hibernate to protect themselves from the low temperatures of winter. They dig burrows in sandy soil and hibernate through the cold months. They double their size before going into hibernation and often group together to increase body heat. American toads come out of hibernation in late March or early April.

Bullfrog

The bullfrog is a large frog found in North America. It is generally green to brown in color with a white or yellow belly. Bullfrogs generally grow from eight to 20 centimeters in length.

Bullfrogs have large eardrums behind their eyes. In males, the eardrums are even bigger than the eyes, while in females, they are almost as big as the eyes. Bullfrogs have completely webbed hind feet except for the last joint of the largest toe, which is free.

Social behavior

Bullfrogs move around on land during rainy nights, but in general, prefer to stay close to their burrows. They spend most of their time alone by riversides, lakes, ponds and other water bodies. Bullfrogs are active both during the day and at night.

Food habits

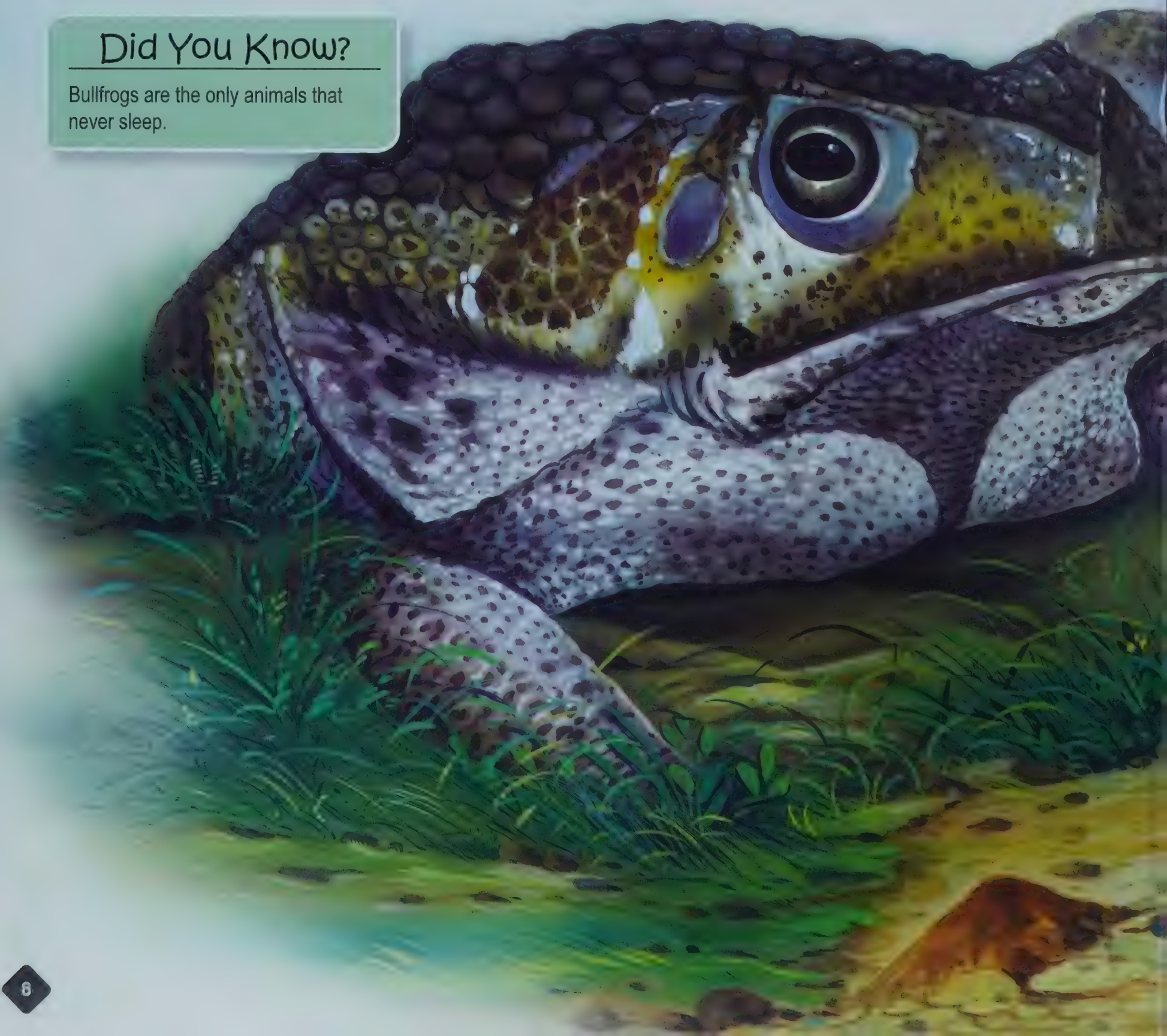
Bullfrogs feed on a variety of small and large animals. They eat crayfish, water beetles, snails, and dragonfly larvae, as well as bigger animals such as fish, small turtles, young water birds, and even other frogs. They have also been known to feed on mice, snakes, and birds.

Range

Bullfrogs are found across the United States, Canada, and Mexico.

Did You Know?

Bullfrogs are the only animals that never sleep.



Bullfrog calls

Bullfrog calls sound like "Jug-o-rum! Jug-o-rum! Br-wum!" Bullfrogs have a deep-pitched voice that can be heard from a quarter of a mile away. The deep "jug-o-rum" is the males Bullfrog's mating call. Juveniles often make sharp calls when startled that sound like "eeep!" when startled.

Leapers, swimmers and divers

Bullfrogs are great leapers, swimmers, and divers. Adult bullfrogs can easily leap a distance of 1.5 to 1.8 meters. They have strong and long hind legs with very large webbed feet, which help them to dive and swim. Bullfrogs can live for long periods underwater because they can breathe through their skin.

African bullfrog

The African bullfrog is one of the biggest frogs in Africa. It is mostly found in open grasslands throughout the sub-Saharan countries of Africa. The adults are dull green in color, while the juveniles are bright green with a yellow stripe down their back. This yellow stripe fades away as the juveniles mature. African bullfrogs are known for their aggressive behavior: they jump at and attack everything that they consider a threat.

Habitat

Bullfrogs are found in almost all aquatic habitats including warm shallow wetlands, rivers, lakes, and ponds. In winter, they make small mud caves in which to hibernate and withstand the extreme temperatures.

Tadpoles

In springtime, female emale bullfrogs lay from 10,000 to 20,000 eggs on the water's surface. The eggs hatch into green or yellow-colored tadpoles which have several black spots on their back. The tadpoles feed on organic debris, algae, plant tissue, and aquatic insects.

Cane Toad

Did You Know?

Male cane toads make a high-pitched call, "brrrr," which sounds like a telephone dial tone.

The cane toad is large toad, ranging in length from 10 to 15 centimeters. It may be gray, yellowish, olive-brown, or reddish-brown in color. Cane toads have a rough belly with dark brown mottling.

Cane toads have a bony head with bony ridges over their eyes. Young cane toads have smooth, dark skin covered with dark bars and blotches. Cane toads have webbed hind feet which help them to swim in water.

Predators

Cane toad tadpoles are eaten by dragonfly nymphs, water beetles, saw-shelled turtles, and keel back snakes, while adults are preyed upon by wolf spiders, freshwater crayfish, estuarine crocodile, crows, white-faced heron, kites, bush stone-curlew, tawny frogmouths, water rats, and giant white-tailed rats.

Range

Cane toads are found in Central and South America and have also been introduced in places such as various Caribbean Islands, Australia, Florida, and the Philippines.

Food habits

Cane toads feed on almost anything they find within their reach, including insects and small animals. They even feed on pet food, decaying animals, and household scraps. The tadpoles of cane toads feed mostly on algae and other aquatic plants and also filter organic matter from water.

Cane toad venom

Cane toads are venomous at all stages of their life cycle. They have very poisonous skin with most of the milky-white venom contained in the parotid glands which are located on the shoulders. When attacked, they ooze this venom which acts on the circulatory and nervous systems. High blood pressure, salivation, convulsions, and even death are the results of exposure to cane toad venom.

Life cycle

Female cane toads lay clutches of eggs in water during the spring season. These eggs hatch, in one to three days, into tiny, black tadpoles with short tails. In 45 to 55 days, the tadpoles grow into toadlets. The toadlets are 1 to 1.5 centimeters long and look similar to adult cane toads. It take two years for them to grow into adults.

Habitat

Cane toads prefer to live by shallow bodies of water located in forests or open areas. They also inhabit sand dunes, coastal wastelands, grasslands, ponds, gardens, drain: pipes, piles of debris, and locations underneath houses.

Behavior

Cane toads are active during spring and summer and hibernate during the colder months. They can sit upright or move around making rapid hops. Cane toads remain active at night, while taking shelter in moist crevices and hollows during the day.

Common Toad

The common toad is dark brown, gray, olive green, or sandy-colored. It has a broad, thick body with a rounded snout and short toes with webbed hind feet. Common toads grow from eight to 15 cm long and may live for up to 40 years. Female common toads are larger than males.

Common toads have warty skin with glands just behind their eyes. These glands secrete a foul-tasting and irritating substance which keeps most predators away.

Habitat

Common toads are found almost everywhere, from fields and woodlands to parks and gardens. During the breeding season, they live in ditches, ponds, and other slow-moving bodies of water.

Range

Common toads are found throughout England, Scotland, and Wales; however, they are absent from Ireland. They are also found throughout most of continental Europe, northwest Africa, and Asia. The common toad is the largest toad in Europe.

Food habits

Common toads feed on almost all invertebrates that are small enough for them to swallow. They use their long, sticky tongue to catch insects, spiders, and worms. Large common toads even feed on small rodents like mice as well as grass snakes.

Behavior

Common toads live alone for most of the year except during the breeding season. Common toads do not "hop," but rather, they "walk." They hunt at night and rest during the day under tree roots, stones, and vegetation. Common toads are most active on rainy nights.

Hibernation

Common toads hibernate under logs and timbers and in leaf piles, burrows, and drainpipes from October to late March. Some common toads may occasionally hibernate in the mud at the bottom of a pond.

Life cycle

Most common toads return to their birth ponds to breed. Female toads lay, in the water, about 600 to 4,000 eggs in long strings. The eggs hatch into small, black tadpoles in about 10 days. The tadpoles grow into toadlets in about two to three months, and the toadlets grow into adults in about four years.

Did You Know?

Common toads often puff themselves up to look much larger than usual. They adopt this defensive posture to protect themselves from predators. They do this by stretching their hind legs and filling their lungs with air.

Special features

The color of common toads varies widely. They may be dark brown, grey, olive, terracotta, or sandy colored, with a grey-white underside. Their color is usually dependent on color of the soil in their habitat. If the soil is brown, then the toads tend to be brownish. If the soil is gray, the toads become grayish. This helps them blend in with the color of their surroundings. Common toads can also remain motionless for hours at a time, which makes them difficult to spot.

Gray Tree Frog

Did You Know?

The gray tree frog has a bright yellow band hidden on its hind legs. The frog startles and confuses predators by showing the bright flash of color; it then tucks in its legs and the bright color instantly disappears.

The gray tree frog is the chameleon of the frog world. This frog is not always gray but keeps changing its color – from dark gray to light green – with changes in temperature, humidity, and light.

Gray tree frogs have very warty skin. The back of the frog has rough, star-shaped blotches and the belly is pale or white. Under each eye, gray tree frogs usually have a light colored spot with a dark edge. Male gray tree frogs have a dark throat, while females only have few black spots on the throat. Gray tree frogs have enlarged toe pads which help them to climb tree trunks and branches.

Habitat

Gray tree frogs live near slow moving or standing bodies of water in wooded areas. They also often live in damp, rotten logs or in the hollow of trees.

Adaptations

Gray tree frogs have two important adaptations. They are excellent climbers, and their large toe pads secrete a sticky mucus which helps them to attach to tree bark. Their other adaptation is the ability to change color to match their surroundings.

Hibernation

Gray tree frogs hibernate in winter under woody debris such as logs, roots, and leaf litter. These frogs can tolerate extremely low temperatures. They survive the freezing temperatures by turning their body fluid into a natural form of antifreeze. During this period, most of their body freezes; their eyes become opaque and their heart temporarily stops beating.

Predators

Gray tree frogs are a source of food for a variety of animals. Apart from being prey for animals such as skunks, opossums, raccoons, and snakes, they are also hunted by other frogs, such as bullfrogs and green frogs.

Range

Gray tree frogs can be found throughout the eastern United States, and in a small area of southern California. They are also found in southern Ontario, Canada.

Food habits

Gray tree frog tadpoles feed mostly on algae and organic waste. Adult gray tree frogs feed on insects, spiders, mites, and other small invertebrates. They may also feed on small frogs and even other tree frogs.

Behavior

Gray tree frogs tend to spend most of their time in trees and only come down during the breeding season. This not only helps them find new food but also protects them from predators. Most gray tree frogs remain quiet during the day to avoid predators. They become active only at night.

Two species

There are two species of gray tree frogs, the eastern gray tree frog and Cope's gray tree frog. However, both species are amazingly similar to each other. They have almost the same physical appearance, habitat, and range. The only way to distinguish one from another is by their call. The eastern gray tree frog voices a slow trill, while Cope's gray tree frog emits a faster and higher pitched trill.

Communication and calls

Gray tree frogs have an excellent sense of hearing and are very sensitive to ground vibrations. They communicate with other gray tree frogs through calls. The call of the gray tree frog is short and lasts for only 0.5 to 3 seconds. Male gray tree frogs call most often during the mating season. Eastern gray tree frogs only make about 17 to 35 notes per second, while Cope's gray tree frogs make about 35 to 70 notes per second.

Cope's gray tree frog

Cope's gray tree frogs are small, smooth-skinned gray tree frogs that can change their color from bright green to gray in a few seconds. These frogs do not have any patterns on their back and their belly is white and unmarked. They are very similar to the eastern gray tree frogs.

Life cycle

A female gray tree frog lays about 700 to 3,800 eggs at a time. In four to five days, the eggs hatch into tadpoles, and in about 60 days they grow into froglets. Froglets grow into adults in one year.

Green Frog

The green frog is yellow, green, or bronze colored. It has a ridge above its eyes which extends down along its back. Sometimes, green frogs have brown spots on their back.

Green frogs have long, powerful hind legs that make them great leapers. Male green frogs have a large, prominent eardrum and a yellow throat, while female green frogs have a smaller eardrum and a white throat.

Life cycle

A female green frog lays about 1,000 to 5,000 eggs at a time. The eggs hatch into tadpoles in three to seven days, and the tadpoles change into froglets in three to 22 months. The froglets grow into adults in one to three years. Green frogs can live for up to 10 years.

Predators

Many animals prey on green frogs. A few known predators are leeches, turtles, fish, snakes, larger frogs, raccoons, and even humans.

Behavior

Green frogs are shy and prefer to live alone. They only come together with other green frogs during the breeding season at breeding ponds. Green frogs are aquatic and are active during the night. Male green frogs actively defend their territories. They are often seen wrestling with invaders to protect their home range.

Did You Know?

The bulging eyes of green frogs allow them to see in many directions. Green frogs can see above, below, in front, and to the left and the right – all at the same time!

Tadpoles

Green frog tadpoles are green in color. The tadpoles have small black dots and yellow bellies. The growing tadpoles feed on diatoms, algae, and very small animals called zooplankton.

Range

Green frogs are found in various parts of the United States and Canada. In the United States, they can be found in Arkansas, Indiana, Kentucky, New Jersey, and Wyoming, and in Canada, they are found in Ontario.

Food habits

Green frogs eat a wide variety of insects and other invertebrates. Slugs, snails, crayfish, spiders, flies, caterpillars, butterflies, and moths are some of their favorite foods. They also eat small snakes and other small frogs.

Habitat

Green frogs live in locations surrounding inland water bodies. They can commonly be seen near swamps, wooded swamps, ponds, lakes, marshes, bogs, banks of slow moving rivers and streams, oxbow lakes, and sloughs. During the rainy season, green frogs move away from water bodies and into wooded areas.

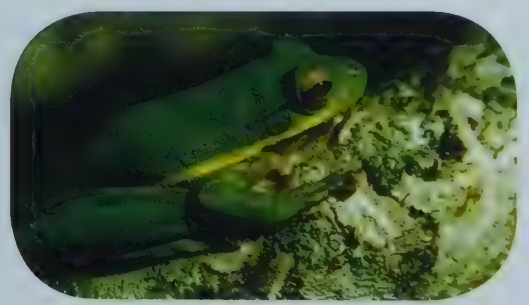
Green frog calls

Green frogs are known to produce six different calls. During the breeding season, the call to attract females is a single "twang." The twang sounds like the pluck of a loose banjo string. The male frogs often make aggressive growling calls while protecting their territories from intruders. They also make alert calls in case of an attack by a predator.

Green Tree Frog

The green tree frog is a medium-sized frog. It is usually bright green in color and has white lips. It may also range in color from yellowish green to olive green to dull green. The color of the belly ranges from light cream to green.

Green tree frogs are nocturnal, meaning they are active at night. They gather in large groups at night to make calls. Male green tree frogs are slightly smaller than the female frogs. The males have a wrinkled throat indicating a vocal pouch and the females have a more rounded body.



Habitat

Green tree frogs usually live in open, swampy areas; they can be found in lakes, streams, slow canals, pasture ponds, cattle tanks, and floating vegetation. They gather near light sources to catch insects and are mostly seen resting on the side of ponds and on top of vegetation during the day.

Changing colors

Green tree frogs can change their color and make themselves dark brown. They do this in response to changes in their environment, such as temperature, humidity, and light. They may also change their color in response to a change in the color of their surroundings.

Life cycle

A female green tree frog lays 200 to 2,000 eggs at a time. She lays her eggs in early spring to mid summer. The eggs hatch into tadpoles in seven days, and the tadpoles grow and change into froglets in about two months. The froglets grow up into adults in two years. Green tree frogs can live for up to five years.

Range

Green tree frogs cling to branches, trees, leaves, and twigs. They live in and around water in the United States, New Zealand, and Australia.

Lateral stripe

The distinguishing feature of the green tree frog is a lateral, light stripe on the body. This stripe extends from the upper jaw and runs along each side of the body. This stripe may be white or pale yellow and varies in length in different individuals. Some green tree frogs may lack this stripe, and instead, have golden yellow spots. Another distinguishing feature of the green tree frog is its large toe pads.

Did You Know?

The green tree frog likes to walk rather than jump. It is also known as the "rain frog" because it mostly calls during damp weather.

Making calls

Male green tree frogs make loud calls that sound like *"queenk-queenk-queenk."* The calls sound like a bell and are repeated up to 75 times per minute in warm weather. Green tree frogs generally make their calls on warm, humid nights, from early spring to late summer.

Food habits

Green tree frogs are opportunistic feeders. They use their sticky tongue to catch their food. They primarily eat insects like crickets, flies, locusts, caterpillars, moths, cockroaches, spiders, mealworms, and wax worms.

Leopard Frog

The leopard frog is common found in North America. It is a medium-sized frog with a length of about seven to 12 centimeters. There are ten species of leopard frogs. Some of them are found in large areas while others are limited to small isolated areas.

Leopard frogs are gray, green, or brown with a white underside and pale-colored, long ridges on their back. These lateral ridges extend from each eye along the back. Leopard frogs are so named because of the brown spots with white or yellow borders on their back, sides, and legs.

Tadpoles

Female leopard frogs lay small, black and white eggs in clusters of 300 to 6,500 in breeding ponds. The eggs take three to four weeks to hatch. The tadpoles are greenish or brown in color with a white belly and often have yellow or black speckles. Leopard frog tadpoles are herbivores and feed on algae and diatoms.

Did You Know?

The Burnsi leopard frog is a leopard frog without spots. It is produced by a genetic mutation.

Habitat and range

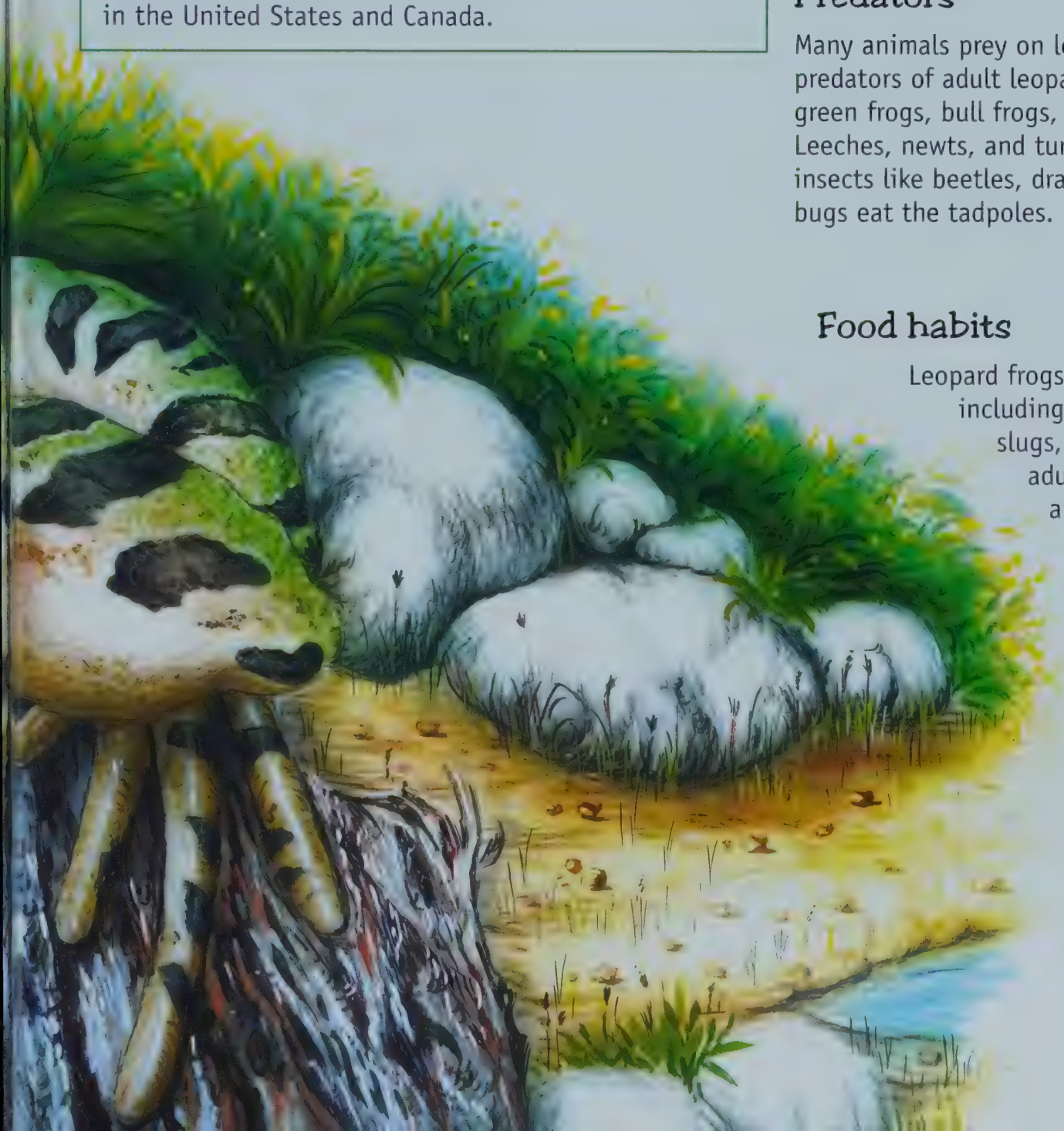
Leopard frogs are found in a wide variety of habitats including marshlands and forested areas at higher elevations. They are also often found in open woods and meadows. They generally stay far away from water but gather in the near water bodies during the breeding season. Leopard frogs are commonly found in the United States and Canada.

Behavior

Leopard frogs are solitary creatures. They establish territories only in the breeding season. Male leopard frogs create small territories in which to make calls for females. During the breeding season, they are most active at night and are also active during the day when searching for food. Leopard frogs migrate towards ponds in the spring season. They leave the water during the summer to find their food in meadows and grasslands.

Predators

Many animals prey on leopard frogs. Some of the predators of adult leopard frogs are fish, birds, snakes, green frogs, bull frogs, raccoons, foxes, and minks. Leeches, newts, and turtles eat leopard frog eggs, and insects like beetles, dragonfly larvae, and giant water bugs eat the tadpoles.



Food habits

Leopard frogs eat terrestrial invertebrates including spiders, insects and their larvae, slugs, snails, and earthworms. Large adults may also eat small vertebrates and other smaller frogs.

Communication

Leopard frogs make grunting and snoring sounds. While jumping to avoid a predator, they either scream loudly or make a squawking sound. Male and female leopard frogs make calls to each other during the breeding season.

Marbled Salamander

The marbled salamander is a small salamander. It has white or light gray cross-bands across its head, back, and tail. Marbled salamanders have a stocky body with a short, broad head and a short tail. Their legs are short, and they have four toes on their forelegs and five toes on their hind legs.

Marbled salamanders reach a length of 10 to 12 centimeters. Male marbled salamanders are smaller than the females.

Behavior

Marbled salamanders are solitary amphibians. They spend most of their time alone under leaf litter or in their underground burrows. Marbled salamanders protect their burrows and very rarely share them with other salamanders. They become active at night when they come out into the open to hunt for food.

Food habits

Marbled salamanders feed on a wide variety of animals including small worms, insects, slugs, and snails. Crustaceans, aquatic insects, and even smaller marbled salamanders are meals of choice for this amphibian. The tadpoles of marbled salamanders feed on zooplankton.

Did You Know?

Marbled salamanders have special flask-shaped glands under their skin, which secrete mucus. The mucus helps to keep their skin moist.

Habitat

Marbled salamanders generally prefer swampy areas or places near water. They inhabit damp woodlands, floodplains, and other low-lying, fertile areas.
Marbled salamanders are also found in dry hillsides with moist environments nearby.

Range

Marbled salamanders are found in the United States from southern New England to northern Florida and west to southern Illinois, southeastern Oklahoma, and eastern Texas. They are also found in some regions in the states of Michigan and Missouri and along the northern border between Ohio and Indiana.

Color pattern

Marbled salamanders have a unique color pattern. They have a black body with gray to white bands. Generally, females have silvery-gray bands, whereas, the males have silvery-white bands. In some individuals the cross-banding pattern is connected, while in others, the pattern is not connected.

Life cycle

A female marbled salamander lays about 50 to 200 eggs in shallow depressions. The female stays near the eggs to guard them. The eggs hatch into larva in two weeks and grow into young salamanders in two months. The young salamanders grow into adult form in a period of 15 months. Marbled salamanders can live for up to four years.

Pacific Tree Frog

The pacific tree frog is a small frog. It has a Y-shaped mark on the top of its head, between the eyes. It ranges in color from tan to black. Males are often smaller than females.

The belly of the Pacific tree frog is cream-colored, and its hind legs are yellow. It has yellow spots on its back and its legs. The most notable feature of these frogs is the black stripe that starts at the shoulders and extends over the eye.

Habitat

Pacific tree frogs are found in a wide variety of habitats. They generally inhabit areas near springs, ponds, streams, swamps, and other moist places in grasslands and woodlands. In several regions, these frogs have also been found at very high elevations and in deserts.

Life cycle

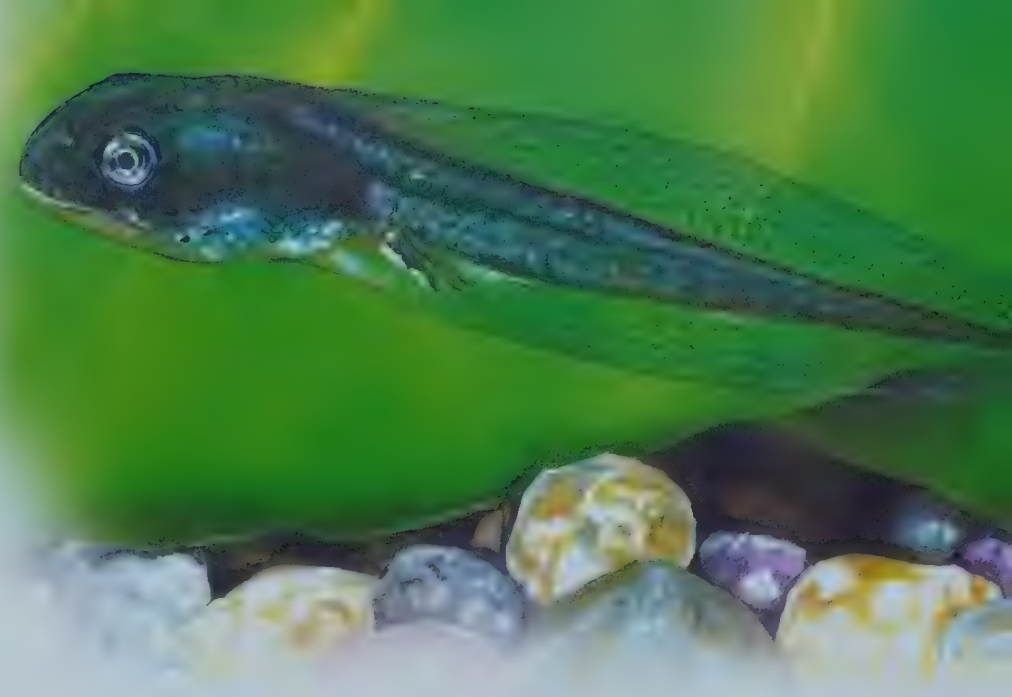
A female Pacific tree frog lays 10 to 70 eggs at a time. The eggs hatch into tadpoles in one to four weeks, and the tadpoles grow into froglets in two to three months. The froglets grows into adults in one year. Pacific tree frogs can live for up to six years.

Did You Know?

The typical call of the Pacific tree frog is widely used in movies to create a tropical background sound. Frogs in cartoons are also commonly given a Pacific tree frog voice.

Tadpoles

Like most other frogs, Pacific tree frogs breed in late winter and early spring. Female Pacific tree frogs lay their eggs in temporary ponds. The eggs attach themselves to aquatic plants and float around in the pond. It takes around one to four weeks for the eggs to hatch into tadpoles. If the temperature of the water is very low, it may take even longer for the eggs to hatch. The tadpoles are grayish-green in color and are about one centimeter long. The tadpoles feed on plant matter in the ponds.



Food habits

Adult Pacific tree frogs feed on a variety of spiders and insects such as flies and mosquitoes. These frogs use their tongues, which are long have a sticky coating, to capture prey. When they see an insect nearby, they flick out their tongue in one rapid movement and stick it to the insect. The frog then swiftly brings the prey back into its mouth. Pacific tree frogs swallow their prey whole.

Range

Pacific tree frogs can be found in the Pacific Northwest region of North America. Their range includes British Columbia in Canada, Washington, Oregon, California, and Nevada in the United States, as well as parts of northern Mexico. They are also found in the Channel Islands of the coast of California and are the only native frog species of the island.

Voice

The call of the Pacific tree frog is a loud two-part, "*kreckek.*" The call is high-pitched, is uttered in sequence, and lasts about one second. Pacific tree frogs usually call at night.

Behavior

Pacific tree frogs live alone. The only time of the year that they gather with others is during the breeding season. They are active at night and spend the day hiding under logs and piles of rotten leaves and other debris. The Pacific tree frog is a source of food for herons, bullfrogs, raccoons, and minks.

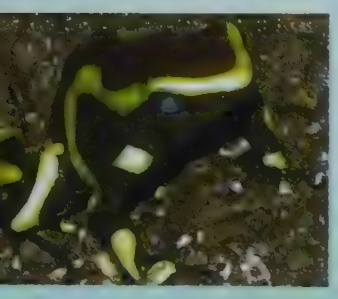
Changing color

Pacific tree frogs can change their color. They may rapidly change color from light to dark in response to changes in temperature or humidity.

Poison Arrow Frog

The poison arrow frog is a small, poisonous frog. It is brilliantly colored with bright red, blue, black, orange, or green marks on the skin. It also has varied patterning, from stripes to spots.

There are about 170 species of poison arrow frogs. They are mostly active in the mornings and evenings. When the tiny frog jumps, it shows flashes of color to warn the predators of the frog's poisonous nature; poison arrow frogs have toxins on their skin.



Green poison arrow frogs

Green poison arrow frogs measure three to four centimeters in length. They are colored differently depending on where they live. However, most are black and green with black bands or spots. These spots can be blue, green, yellowish-green, or white. Green poison arrow frogs live in the rainforests of Central and South America, including Nicaragua, Costa Rica, and Bolivia. Humans have introduced them to Hawaii. Green poison arrow frogs feed on small insects like ants, termites, and spiders.

Blue poison arrow frogs

Blue poison arrow frogs can be found in different shades of blue, from cobalt to sapphire, with black spots on their head. Blue poison arrow frogs generally live in the dark and moist environments of rainforests. They are only found in the southern part of Suriname in South America. Like other frogs, they eat crickets, termites, ants, and fruit flies.

Habitat and range

Poison arrow frogs are found abundantly in the rainforests of Central and South America. They can be found in Panama, Nicaragua, Venezuela, Colombia,Brazil, Guyana, Costa Rica, and Suriname. They generally stay on the ground and prefer to live in moist and shady places. They can often be seen on damp leaf litter on the forest floor.

Life cycle

Poison arrow frogs breed throughout the year. The female poison arrow frog lays 40 to 50 eggs at a time. The females lay their eggs on land – under a leaf or on the ground. The eggs hatch into tadpoles in two to four weeks. The tadpoles grow and change into froglets in two to three Months, and the froglets grow into adults in one to two years. Poison arrow frogs can live for up to 15 years.

Behavior

Poison arrow frogs are different from most frogs. Male poison arrow frogs take care of the eggs and the young tadpoles. He keeps the eggs moist by carrying water from a pool. As soon as the tadpoles hatch, they wriggle onto their father's back. The male then carries the tadpoles to a pool of water and deposits them there. In one to two months, the tadpoles begin to feed on algae and dead insects and metamorphose into frogs.

Special features

The skin of poison arrow frogs is sticky because of the mucus. This mucus helps to hold in moisture and enables the tadpoles to hold on tightly when being carried by the adult frog. The toes of poison arrow frogs have suction pads that help them when climbing. These pads enable the frog to easily cling to leaves and branches.

Did You Know?

Poison arrow frogs are also called poison dart frogs. The Colombian Indians used the poison from the skin of poison arrow frogs to smear on their hunting arrows and darts.

Adaptations

Because of their size, poison arrow frogs are especially suited for life in the rainforest. The small size of the frog prevents it from being eaten. Many animals cannot even see the frog. The special colors of the frog also help to camouflage it in its surroundings. The poisonous skin of the frog helps it to escape from other animals. It can eat any insect around, but nothing can eat it.

Food habits

Poison arrow frogs eat algae, crickets, ants, and spiders. They especially love ants because the ants are the source of their poison.

Blue spotted salamanders

Blue spotted salamanders are one of the species of spotted salamanders. They are black or dark gray in color with pale black on their underside. Blue spotted salamanders have blue spots on their body. They measure seven to 13 centimeters in length. Blue spotted salamanders are found in the Great Lakes Basin, northern New York, Massachusetts, and Illinois in the United States. They are seen spending most of their time on land even during the winter hibernation period.

Spotted Salamander

The spotted salamander is a large salamander. It is bluish-black in color with yellow or orange spots arranged in two rows from head to tail. Some spotted salamanders are also found without spots on their body. Spotted salamanders can grow up to a length of 23 centimeters.

Spotted salamanders have a slate-gray colored belly. Adults have a light-gray colored lower lip and throat. They have four toes on their front feet and five toes on their back feet. Some spotted salamanders have two bright orange spots on their head. The larva of spotted salamanders are olive green with light-colored undersides and no markings.

Range

Spotted salamanders are found in eastern Canada and throughout the eastern and midwestern United States. They are most commonly found in the Piedmont and Mountain regions of South Carolina and Georgia.

Mutualism

Spotted salamanders have a mutualistic relationship with algae. The salamanders lay eggs in masses surrounded by a jelly-like substance. The algae forms colonies around these egg masses and give the masses a greenish. In this relationship, algae gain a safe place to grow while the eggs are provided with oxygen.

Food habits

Spotted salamanders feed on almost anything that they can catch and swallow mostly invertebrates and insects. The larva of spotted salamanders prey on other insect's larva, tadpoles, water fleas, and sometimes, even each other.

Did You Know?

Spotted salamanders are difficult to spot in spite of being large and having bright spots.

Habitat

Spotted salamanders are most commonly found in moist woodlands near floodplains. They are also found in upland forests and mountainous regions. Spotted salamanders spend most of their lives hidden under rocks and logs or inside burrows. They are known to live in the burrows of other animals. They come out of their hiding places only at night to search for food.

Life cycle

Spotted salamanders move toward their breeding ponds in late winter or early spring. They generally make these journeys on rainy or hot, humid nights. Female spotted salamanders lay 100 to 300 eggs in dense globular masses. The eggs hatch into tiny larva in one to two months. The larva change into young salamanders in about two to four days. Young spotted salamanders, like adult spotted salamanders, spend most of their time underground or under rocks, logs, or other debris.

Tiger Salamander

The tiger salamander is a beautiful salamander. It has a large and stocky body with yellow blotches or spots on its black or gray-colored back. Tiger salamanders grow from 17 to 33 centimeters in length. The males are longer than the females.

Tiger salamanders have a large head with a broad, rounded snout and round eyes. They have a yellowish or olive belly with dark pigments. Adult tiger salamanders have a yellow lower lip and throat. Tiger salamanders have four toes on their front feet and five toes on their back feet, just like spotted salamanders.

Predators

Many animals prey on tiger salamanders. Some of the known predators are badgers, snakes, bobcats, and owls. Tiger salamanders are also eaten by raccoons, coyotes, bullfrogs, turtles, and various kinds of fish.

Behavior

Tiger salamanders spend most of their time in underground burrows. They are often found above the ground on damp nights, and during heavy spring and fall rains, can be seen in groups. They migrate in the winter season.

Range

The tiger salamander is the largest mole salamander in North America. It is found almost throughout North America, ranging from Alaska to Labrador to the southern edge of the Mexican Plateau. It is most common in the region surrounding Chicago.

Did You Know?

Some tiger salamanders cannot mature due to dry conditions. In these cases, they remain in the larval stage for the rest of their lives. These immature larvae can reproduce in water. This phenomenon is known as neoteny.

Life cycle

In early spring, tiger salamanders go back to their places of birth to breed. They often travel many miles to reach this location. Females lay 100 to 200 eggs in small pools and attach them to decayed twigs, grass stems, and leaves. The eggs hatch into larvae in two to four weeks, and the larvae grow into young salamanders in two to three months. These grow into adults in a period of five years.

Food habits

Tiger salamanders mostly feed on worms, snails, insects, and slugs. They may also feed on smaller salamanders, frogs, newborn mice, and baby snakes. The larvae of tiger salamanders feed on small crustaceans and insect larvae.

Habitat

Tiger salamanders generally inhabit forests, fields, grasslands, or marshy areas. They live in underground burrows near small, permanent water bodies. These amphibians are also found living beneath rotten leaves or logs.

Glossary

blotch: A spot or discolored patch on the skin.

boardwalk: A walkway made of thick boards.

crayfish: A small freshwater crustacean that resembles a small lobster.

debris: The scattered remains of plants and animals.

Devonian Period: A geological period after the Silurian and before the Carboniferous in the Paleozoic Era.

diatom: A microscopic algae.

estuarine: The lower portion of a waterway where a freshwater stream enters saltwater.

growling: An angry or menacing sound of an animal.

hatch: The production or emerging of young ones from eggs.

heron: A wading bird with a long neck and legs and a tapered bill.

hibernation: An inactive state that occurs during wintertime.

hind leg: The back limb of an animal.

invertebrate: An animal without backbone or spinal column.

lateral: The side of a structure or body that is away from the midline.

leech: A blood-sucking annelid worm living in water or in a wetland.

locust: A large grasshopper, having short antennae, that lives in warm regions.

metamorphosis: The changing stage from a larva to an adult that occurs in some animals.

migrate: The moving of an animal from one place to another.

mink: A dark-colored, semi-aquatic mammal with partly webbed feet.

mottling: The irregular spots or markings of different shades.

mucus: A thick fluid secreted by the body.

parotid: The largest salivary gland below and in front of each ear.

pigment: A coloring substance or matter in plant or animal tissue.

porch: A covered or open entrance to a building.

predator: An animal that hunts and eats other animals

raccoon: A tree-climbing, nocturnal animal native to central and North America.

snoring: Loud breathing with a harsh sound made during sleep.

squawk: A harsh or loud cry.

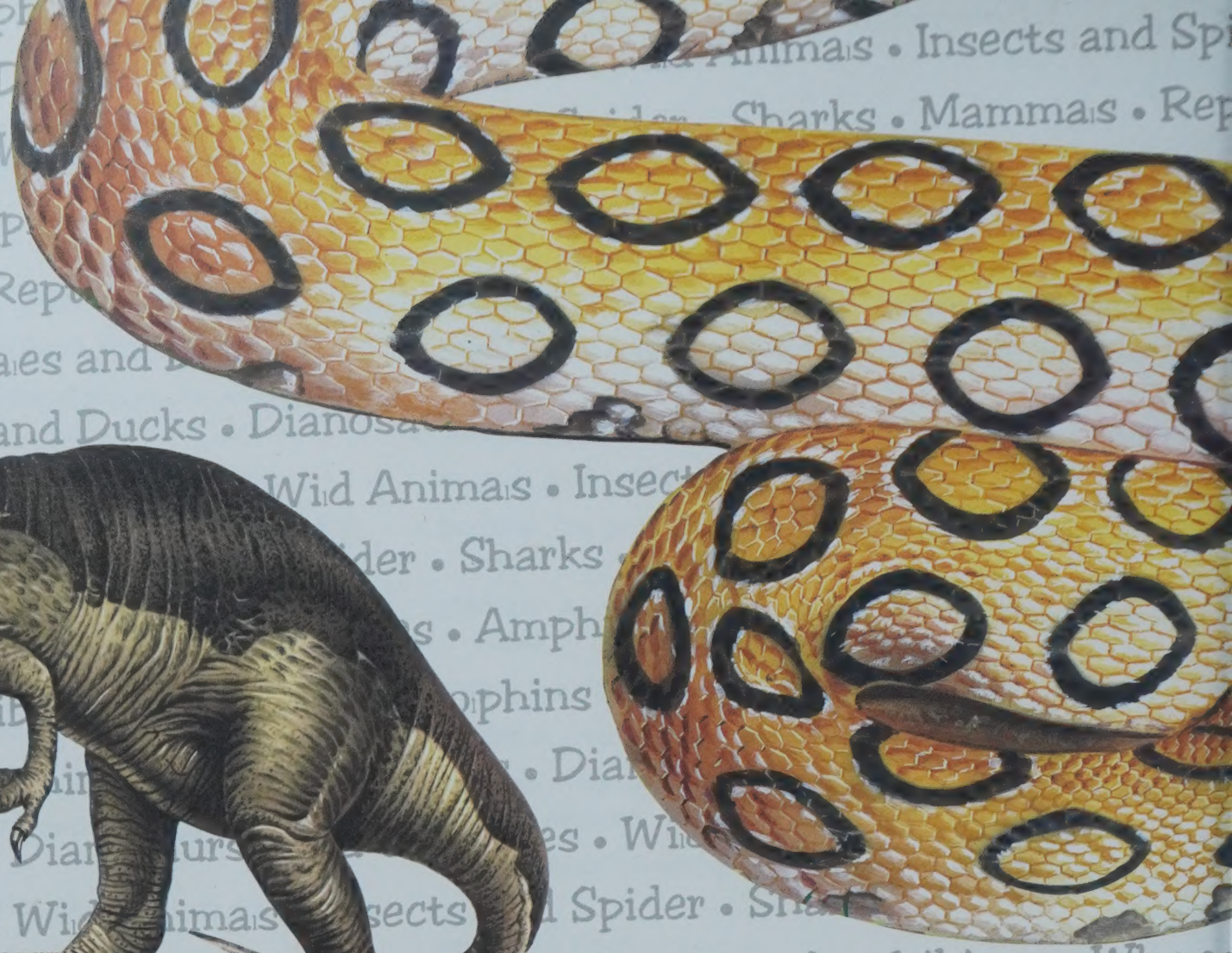
toxin: A poisonous substance produced by certain microorganisms that can cause illness, injury, or death.

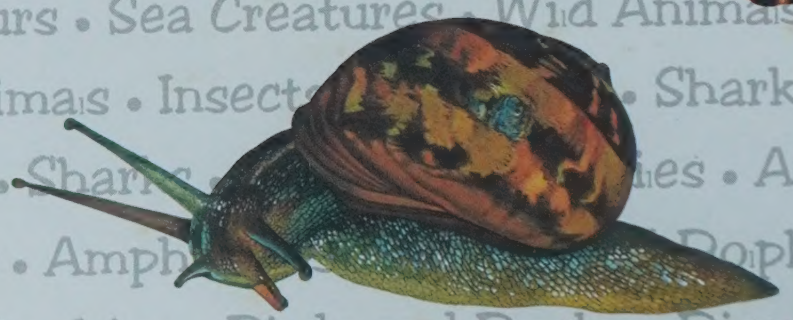
trill: A rapid series of musical tones.

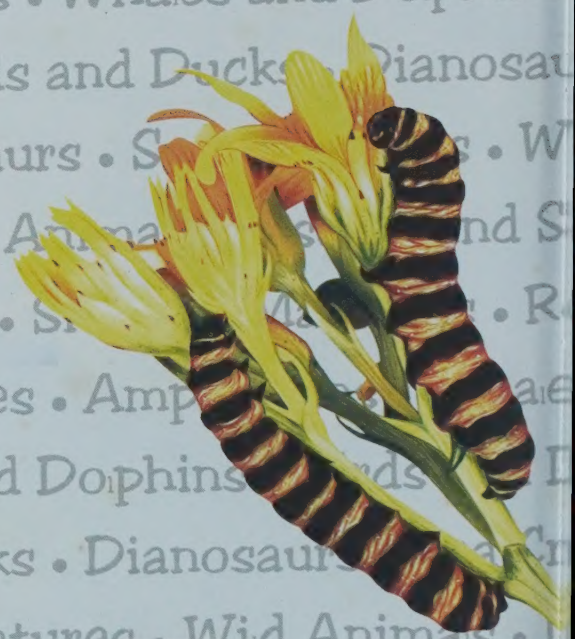
venomous: Poisonous substance.

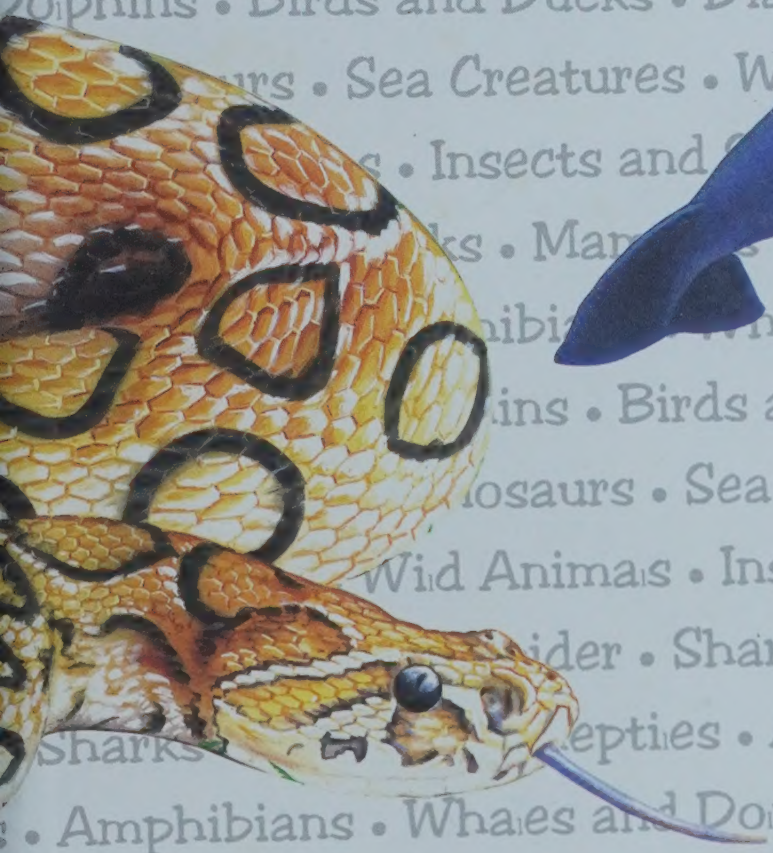
wart: A hard and small growth on skin.

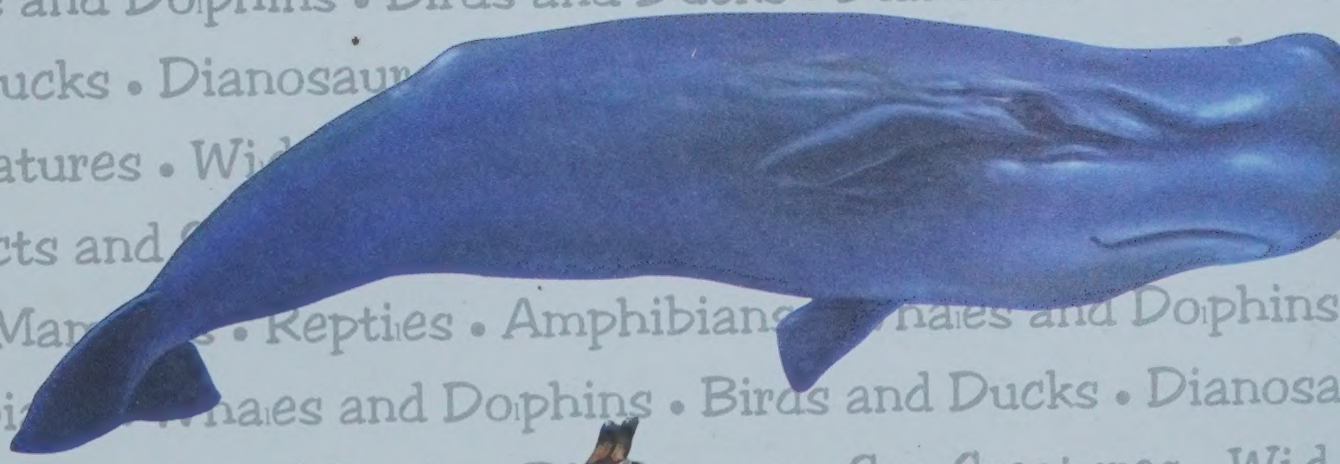
zooplankton: The animal planktons including protozoans, copepods, or rotifers.

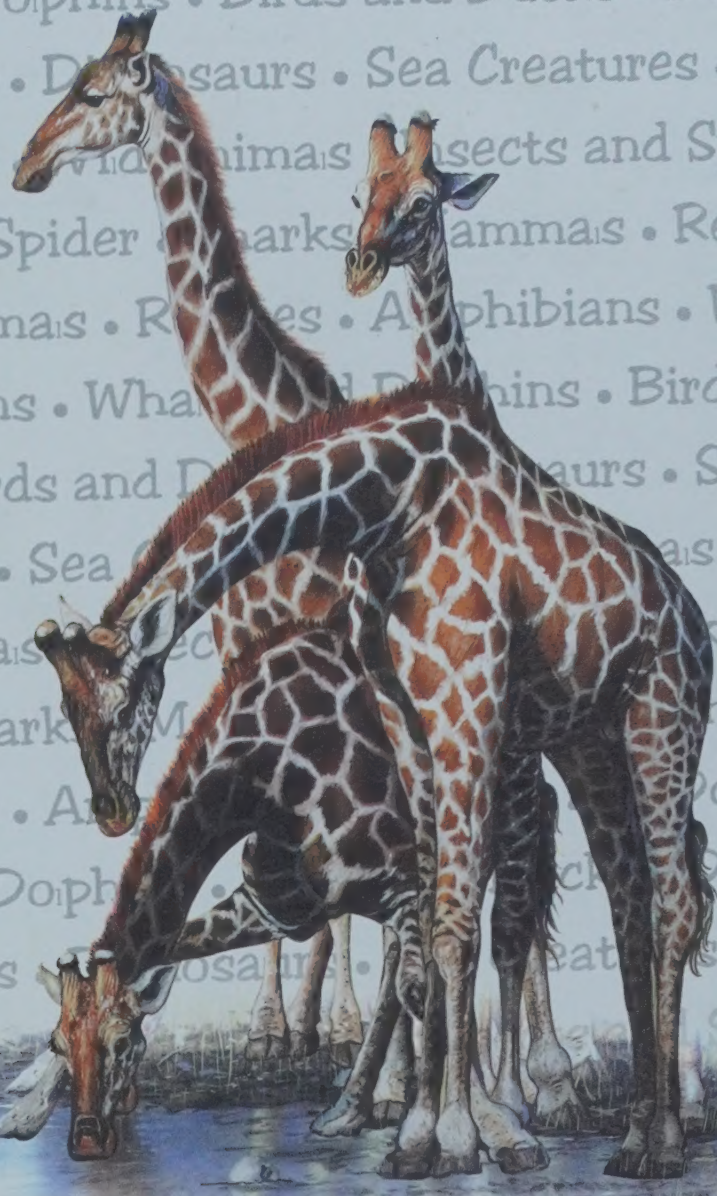


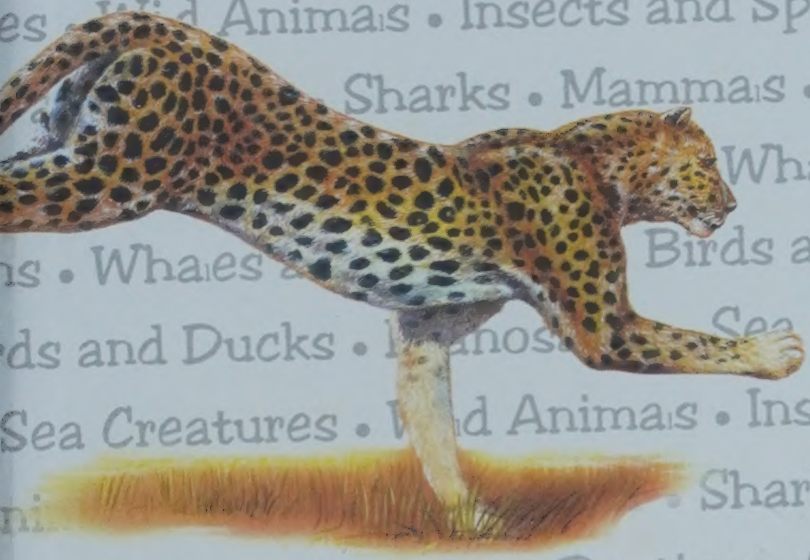












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Amphibians

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